Claims

1. A porous sheet for treating exhaust gases of combustion engines in open channels, **characterized** in that at least part of the porous sheet (3, 3a, 3b) has a covering support (33) having pores (35) over 10 nm and coarse particles over 1,4 µm.

2. A porous sheet(s) according to claim 1, **characterized** in that essentially all openings (32) of the porous sheet (3, 3a, 3b) have a filling support (33) having pores (35) over 10 nm and coarse particles over 1,4 µm.

3. A porous sheet(s) according to claim 1 or 2, **characterized** in that said porous sheet (3, 3a, 3b) is a mesh sheet.

4. A porous sheet according to claim, 3 **characterized** in that the mesh size of said mesh sheet (3) is from 30 to 300.

5. A porous sheet according to any preceding claim, **characterized** in that said porous sheet is a corrugated sheet (3b).

6. A porous sheet according to any preceding claim, **characterized** in that the median particle size of support (33) is from 1,5 to 3,5 µm.

7. A porous sheet according to any preceding claim, **characterized** in that the median pore size of said support (33) is over 5 nm.

8. A porous sheet according to any preceding claim, **characterized** in that the median pore size of said support (33) is over 10 nm.

9. A porous sheet according to any preceding claim, **characterized** in that said support (33) comprises catalytically active material.

10. A porous sheet according to any preceding claim, **characterized** in that said support (33) comprises catalytically inert particles having median particle size from 10 to 200 µm.

11. A porous sheet according to any preceding claim, **characterized** in that said support (33) comprises catalytically inert coarse alumina-, silica, zirconia-, ceria- or/and titania-particles.

12. A porous sheet according to any preceding claim, **characterized** in that at least part of support (33) has been milled.

13. A porous sheet according to any preceding claim, **characterized** in that the area mass of support (33) is from 20 to 200 g/ m^2.

14. A porous sheet according to any preceding claim, **characterized** in that the BET specific surface area of support (33) is from 30 to 300 m^2/g.

15. A porous sheet according to any preceding claim, **characterized** in that said support (33) comprises fibres, which are projecting out from the plane of said support.

16. A metal substrate having open channels for treating exhaust gases of combustion engines, **characterized** in that said substrate (1) comprises at least one porous sheet according to claim 1 to 15.

17. A metal substrate according to claim 16, **characterized** in that said substrate (1) comprises at least one other sheet (2a, 2b, 5).

18. A metal substrate according to claim 17, **characterized** in that said other sheet (2a, 2b, 5) is smooth, perforated, mesh, wire mesh or fibrous sheet.

19. A metal substrate according to claim 16 to 18, **characterized** in that said other sheet is a flat (2b) or corrugated sheet (2a, 5).

20. A metal substrate according to claim 16 to 19, **characterized** in that other sheet(s) (2a, 2b, 5) has been essentially covered with the support (33) of porous sheet(s) (3, 3a, 3b) according to claim(s) 1 to 15.

21. A metal substrate according to claim 16 to 20, **characterized** in that other sheet(s) (2a, 2b, 5) and porous sheet(s) (3, 3a, 3b) have been covered with same support (33).

22. A metal substrate according to any claim 16 to 21, **characterized** in that porous sheet(s) (3, 3a, 3b) and/or other sheet(s) (2a, 2b, 5) comprises impressions and/or projections.

23. A metal substrate according to any claim 16 to 22, **characterized** in that said substrate (1) is a pre-oxicatalyst, hydrolysis catalyst and/or a SCR oxicatalyst.

24. A method for manufacturing a porous sheet for treating exhaust gases of combustion engines in open channels, **characterized** in that the porous sheet (3,

3a, 3b) is at least partially covered with a support (33) having pores (35) over 10 nm and coarse particles over 1,4 µm.

25. A method for manufacturing a porous sheet according to claim 24, **characterized** in that the essentially all openings (32) of porous sheet(s) (3, 3a, 3b) are filled with support (33) having pores (35) over 10 nm and coarse particles over 1,4 µm.

26. A method for manufacturing a metal substrate for treating exhaust gases of combustion engines, **characterized** in that at least one porous sheet according to claim 1 to 15 is joined to said substrate (1) so that there are open channels (4) in said substrate.

27. A porous sheet(s) according to claims 1 to 15 or manufactured according to a method of claim 24–25, **characterized** in that said porous sheet(s) (3, 3a, 3b) is used to purify impurity particles (34) from exhaust gases of combustion engines.

28. A metal substrate according to claims 16 to 23 or manufactured according to a method of claim 26, **characterized** in that said substrate (1) is used to purify impurity particles of exhaust gases of combustion engines.